<< PREVIOUS SECTION

Fire Frequency and Land Condition

Indicator: Fire Frequency and Land Condition. The western U.S. map shows the relative risk of losing one or more key components that define an ecological system based on departures from the historic natural fire regime and ecosystem attributes such as hydrologic function. This relative risk rating is shown for three fire regimes: frequent fires (recurring 0-35 years), common (35-100 years), and infrequent (200+ years).

Key Findings: Elko, Nevada, serves as an example for understanding this map. In this region cheatgrass has invaded the sagebrush systems so extensively that fires occur with greater frequently (annually) than the historic natural regime (35-100+ year return time) would indicate.

Limitations: This map shows fire frequency on a landscape scale. Local areas should be reviewed carefully for factors that may indicate a change in fire frequency or land condition.

Source: Coarse-scale Spatial Data for Wildlife Fire and Fuel Management (November 1999), produced by Prescribed Fire and Fire Effects Research Work Unit, Rocky Mountain Research Station. Available at: http://www.fs.fed.us/fire/fuelman. This map presents this data smoothed using a 10x10 cell window.

Comments: Modified systems clearly change the natural fire history of an area. The example provided above with Elko, Nevada, provides context in how the landscape has been modified and non-native vegetation that is more prone to fire becomes the dominating factor in determining the frequency of such fire. The ephemeral ranges of the desert southwest are another example of modification of fire frequency. The joshua tree and creosote bush ranges have an invaded understory of annual cheatgrass which is highly flammable when dry. When these areas are burned, the joshua tree and creosote bush are often damaged beyond recovery, leading to an even greater potential of annual vegetation establishment.

